

SiO <sub>2</sub>
$B_2Q_3$
$Al_2Q_3$
MgÒ
CaO \
SrO \
BaO \
with SrQ + BaO
ZnO

- 3. (Amended) An aluminoborosilicate glass according to Claim 1, containing at most 5% by weight MgO based on oxide.
- 4. (Amended) An aluminoborosilicate glass according to Claim 1, containing at least 60% by weight SiO<sub>2</sub> based on oxide.
- 5. (Amended) An aluminoborosilicate glass according to Claim 1, containing more than 11% by weight MgO, CaO, SrO and BaO together based on oxide.
- 6. (Amended) An alkali-free aluminoborosilicate glass consisting essentially of by weight % based on oxide,

SiO <sub>2</sub>	
$B_2O_3$	\
$Al_2O_3$	\
MgO	\
CaO	\
SrO	\
BaO	\
with SrO + BaO	,
ZnO	
$ZrO_2$	
TiO <sub>2</sub>	
With $ZrO_2 + TiO_2$	
$As_2O_3$	
$Sb_2O_3$	
$SnO_2$	
$CeO_2$	
-	

> 58 - 65,
> 6 - 11.5
> 14 - 20,
> 3 - 6,
>4.5-10
0 - 1.5,
> 1.5 - 6,
> 3,
0 - < 2,
0 - 2,
0 - 2,
0 - 2,
0 - 1.5,
0 - 1.5,
0 - 1.5,
0 - 1.5.



Cont

C1<sup>-</sup> 
$$0 - 1.5$$
,  
F<sup>-</sup>  $0 - 1.5$ ,  
 $SO_4^{2-}$   $0 - 1.5$ , and  
Wherein  $As_2O_3 + Sb_2O_3 + SnO_2 + CeO_2 + Cl^-$   
 $+ F^- + SO_4^{2-}$   $0 - 1.5$ ,

and essentially no alkali bxides.

- 10. (Amended) An aluminoborosilicate glass according to claim 1, containing at least 5% by weight CaO based on oxide.
- 11. (Amended) An aluminoborosilicate glass according to claim 1, containing > 7 to  $\leq 11\%$  by weight B<sub>2</sub>O<sub>3</sub> based on oxide.
- 12. (Amended) An aluminoborosilicate glass according to claim 1, containing > 2.5% to ≤5% by weight BaO based on oxide.
- 13. (Amended) An aluminoborosilicate glass according to claim 1, containing more than 3% by weight SrO and BaO together based on oxide.
- 14. (Amended) An aluminoborosilicate glass according to claim 1, containing up to 0.5% by weight ZnO based on oxide.
- 15. (Amended) An aluminoborosilicate glass according to claim 1, containing up to 1.5% by weight ZnO based on oxide.
- 16. (Amended) An alkali-free aluminoborosilicate glass consisting essentially of by weight % based on oxide,

SGW-115

ZnØ	0-<2,
ZrO <sub>2</sub>	≤0.5, and
TiO <sub>2</sub>	<b>≤</b> 0.5,

17. (Amended) An aluminoborosilicate glass according to Claim 2, containing at most 5% by weight MgO based on oxide.

- 18. (Amended) An aluminoborosilicate glass according to Claim 2, containing at least 60% by weight SiO<sub>2</sub> based on oxide.
- 19. (Amended) An aluminoborosilicate glass according to Claim 2, containing more than 11% by weight based on oxide MgO, CaO, SrO and BaO is greater together.
- 20. (Amended) An alkali-free aluminoborosilicate glass consisting essentially of by weight % based on oxide,

SiO <sub>2</sub>		> 58 - 65,
$B_2O_3$		> 6 - 11.5,
$Al_2O_3$		> 14 - 20,
MgO		> 3 - 6,
CaO		> 4.5 - 10,
SrO	•	0 - < 4,
BaO		> 2.5 - 6,
with S	rO + BaO	> 3,
ZnO		0 - 0.5,
$ZrO_2$		0 - 2,
$TiO_2$		0 - 2,
with Z	$O_2 + TiO_2$	0-2,
$As_2O_3$		0 - 1.5,
$Sb_2O_3$		0 - 1.5,
$SnO_2$		0 - 1.5,
$CeO_2$		0 - 1.5,
Cl <sup>-</sup>		0 - 1.5,
F-		0 - 1.5,
$SO_4^{2-}$		0 - 1.5, and

Wherein 
$$As_2O_3 + Sb_2O_3 + SnO_2 + CeO_2 + Cl^2 + F^2 + SO_4^{2-2}$$
and essentially no alkali oxides.

$$0 - 1.5$$
,

- An aluminoborosilicate glass according to claim 2, containing 24. (Amended) at least 5% by weight CaO based on oxide.
- An aluminoborosilicate glass according to claim 2, containing > 7 25. (Amended) to  $\leq 11\%$  by weight  $B_2O_3$  based on oxide.
- An aluminoborosilicate glass according to claim 2, containing 26. (Amended) > 2.5% to ≤5% by weight BaO based on oxide.
- An aluminoborosilicate glass according to claim 2, containing more 27. (Amended) than 3% by weight SrO and BaQ together based on oxide.
- An aluminoborosilicate glass according to claim 2, containing up to 28. (Amended) 0.5% by weight ZnO based on oxide.
- An aluminoborosilicate glass according to claim 2, containing up to 29. (Amended) 1.5% by weight ZnO based on oxide.
- An alkali-free aluminoborosilicate glass consisting essentially 30. (Amended) of by weight % based on oxide,

SiO <sub>2</sub>	> 58 - 65,
$B_2O_3$	> 6 – 11.5,
$Al_2O_3$	> 14 – 20,
MgO	> 3 - 6,
CaO	> 4.5 - 10,
SrO	0 – < 4,
BaO	> 2.5 - 6,
with SrO + BaO	> 3,
ZnO	0 - 0.5,
ZrO <sub>2</sub>	≤0.5, and

az

31. (Amended) An aluminosilicate glass according to claim 2, containing up to 3% by weight SrO based on oxide.

36. (Amended) An alkali-free aluminoborosilicate glass containing less than 1500 ppm alkali metal oxides and consisting essentially of by weight % based on oxide,

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$$SiO_2$$
 $B_2O_3$ 
 $Al_2O_3$ 
 $MgO$ 
 $CaO$ 
 $SrO$ 
 $BaO$ 
 $with SrO + BaO$ 
 $ZnO$ 

and essentially no alkali oxides.

37. (Amended) An alkali-free aluminoborosilicate glass containing less than 1500 ppm alkali metal oxides and consisting essentially of by weight % based on oxide,

SiO <sub>2</sub>	
$B_2O_3$	-
$Al_2O_3$	-
MgO	-
CaO	-1
SrO	
BaO	1
with SrO +	BaO
ZnO	1

## Please enter the following new claims:

--38. An alkali-free aluminphorosilicate glass consisting of by weight % based on

oxide,

 $SiO_2$   $B_2O_3$   $Al_2O_3$  MgO CaO SrO BaO with SrO + BaO ZnO

> 58 - 65, > 6 - 11.5, > 14 - 20, > 3 - 6, > 4.5 - 10, 0 - 1.5, > 1.5 - 6, > 3, and 0 - < 2,

and essentially no alkali oxides

39. An alkali-free aluminoborosilicate glass consisting of by weight % based on

oxide,

SiO<sub>2</sub>
B<sub>2</sub>O<sub>3</sub>
Al<sub>2</sub>O<sub>3</sub>
MgO
CaO
SrO
BaO
with SrO + BaO
ZnO

> 58 - 65, > 6 - 11.5, > 14 - 20, > 3 - 6, > 4.5 - 10, 0 - < 4, > 2.5 - 6, > 3, and

0 - 0.5,

and essentially no alkali oxides.

40. An alkali-free aluminoborosilicate glass consisting essentially of by weight % based on oxide,

 $SiO_2$   $B_2O_3$   $Al_2O_3$  MgO CaO SrO BaO with SrO + BaO

> 58 - 65, > 6 - 11.5, > 14 - 20, > 3 - 6, > 4.5 - 10, 0 - 1.5, > 1.5 - 6,

ZnO	0 - < 2,
$ZrO_2$	0-2,
TiO <sub>2</sub>	0-2,
With $2rO_2 + TiO_2$	0-2,
$As_2O_3$	0 - 1.5,
$Sb_2O_3$	0 - 1.5,
$SnO_2$	0 - 1.5,
CeO <sub>2</sub>	0 - 1.5,
Cl. \	0 - 1.5,
F \	0 - 1.5,
$SO_4^{2-}$	0 - 1.5, and
Wherein $As_2O_3 + Sb_2O_3 + SnO_2 + CeO_2 + Cl$	
$+ F^{-} + SO_4^{2-}$	0 - 1.5,

as Cont

and essentially no alkali oxides.

41. An alkali-free aluminoborosilicate glass consisting essentially of by weight % based on oxide,

and essentially no alkali oxides.

42. An alkali-free aluminoborosilicate glass consisting essentially of by weight % based on oxide,

$$\begin{array}{c|c} SiO_2 & > 58-65, \\ B_2O_3 & > 6-11.5, \\ Al_2O_3 & > 14-20, \\ MgO & > 3-6, \\ SrO & > 4.5-10, \\ 0-<4, \\ BaO & > 2.5-6, \\ with SrO+BaO & > 3, \end{array}$$

	ZnO	0 - 0.5,
	ZrO <sub>2</sub>	0-2,
	TiO <sub>2</sub>	0-2,
	with $ZrO_2 + TiO_2$	0-2,
	$As_2O_3$	0 - 1.5,
	$Sb_2O_3$	0 - 1.5,
	$SnO_2$	0 - 1.5,
	$CeO_2$	0 - 1.5,
	Cl	0 - 1.5,
	F <sup>-</sup>	0 - 1.5,
	$SO_4^2$	0 - 1.5, and
$\alpha$	Wherein $As_2O_3 + Sb_2O_3 + SnO_2 + CeO_2 + Cl^2$	
(15	$+F$ $+SO_4^2$	0 - 1.5,
and essentia	ılly no alkali oxides.	

An alkali-free aluminoborosilicate glass consisting essentially of by weight % 43. based on oxide,

SiO <sub>2</sub>	> 58 - 65,
$B_2O_3$	> 6 - 11.5,
$Al_2O_3$	> 14 - 20,
MgO	> 3 - 6,
CaO	> 4.5 - 10,
SrO	0 – < 4,
BaO	> 2.5 - 6,
with SrO + BaO	> 3,
ZnO	0 - 0.5,
$ZrO_2$	≤0.5, and
TiO <sub>2</sub>	≤0.5,

and essentially no alkali oxides.

An alkali-free aluminoborosilicate glass consisting of less than 1500 ppm 44. alkali metal oxides and consisting of by weight % based on oxide,

$SiO_2$	S 50 65
5102	> 58 - 65,
$B_2O_3$	> 6 - 11.5,
$Al_2O_3$	> 14 - 20,
MgO	> 3 - 6,
CaO	> 4.5 - 10,
SrO	0-1.5,
BaO	> 1.5 - 6,
with SrO + BaO	> 3, and

45. An alkali-free aluminoborosilicate glass consisting of less than 1500 ppm alkali metal oxides and consisting of by weight % based on oxide,

	$\mathbf{B_{2}}$
$\sim$ $\sim$	Al
	Mg
( 1>	Ca
$\sim$ $\sim$	Sr
(I)	Ba
	wit

SiO <sub>2</sub>
$B_2O_3$
$Al_2O_3$
MgO \
CaO \
SrO \
BaO \
with SrO + BaC
ZnO

- 46. An aluminoborosilicate glass according to claim 40 containing Sb<sub>2</sub>O<sub>3</sub>.
- 47. An aluminoborosilicate glass according to claim 42 containing Sb<sub>2</sub>O<sub>3</sub>.
- 48. An aluminoborosilicate glass according to claim 1 that has a density of less than 2.6 g/cm<sup>3</sup>. --